H. M. SINCLAIR.

RECEPTACLE.

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1,114,546. Patented Oct. 20, 1914

Fig. 1.

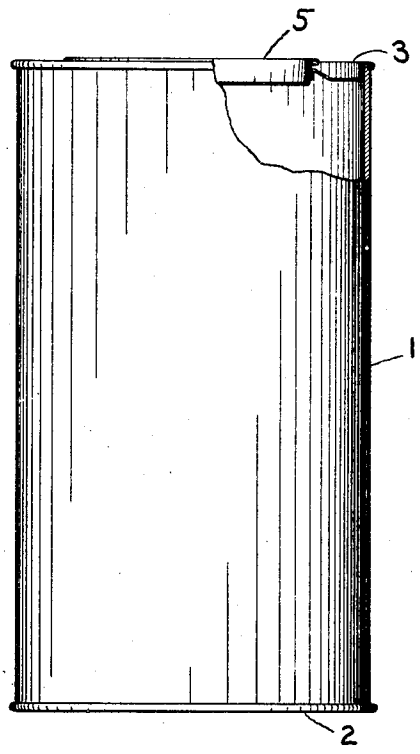
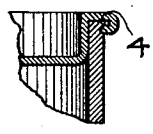


Fig. 2.



WITNESSES:—

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RECEPTACLE.

1,114,546. Specification of Letters Patent. Patented Oct. 20, 1914.

Application filed December 4, 1913. Serial No. 804,782.

To all whom it may concern:

Be it known that I, HARRY M. SINCLAIR, a citizen of the United States, and a resident of Toledo, in the county of Lucas and State of Ohio, have invented a certain new and useful Receptacle; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

My invention relates to packing receptacles.

It particularly relates to receptacles and containers for materials that have evaporative or absorbent elements, or materials which are chemically active or unstable.

The invention is particularly applicable to receivers for containing chemical reagents such as active acids or alkali materials or unstable chlorids that will form chlorin gas, or will form in the presence of moisture chlorates or hydro-chloric acid.

The invention may be contained in great variety of apparatus and devices.

I have illustrated in the drawings and shall describe hereinafter, a receptacle for containing highly active chemical agents. The container shown has been particularly designed for containing chlorid of lime.

Chlorid of lime is a very unstable compound and readily breaks down in the presence of moisture to form hydrochloric acid which is exceedingly active. These compounds and elements attack metals with a great avidity. They will also attack wood and paper and cause them to rot or burn out. Zinc affords a resistant material out of which such receptacles may be formed, but inasmuch as a can formed of zinc requires solder the solder is speedily attacked by the chlorid of lime. Lacquered and coated sheet metals, such as tin and tinned sheet metal, form a good container for chlorid of lime, the great difficulty, however, being to form air tight seams without the use of solder.

In my invention a paper tube is formed which is thoroughly impregnated with a material. All of the cells throughout the tube are completely filled and the surfaces of the tube are completely covered with an acid and alkali resisting and water-proof material. The ends are formed of lacquered tin which seal the tube by crimping the edges of the tin so as to tightly grip the ends of the tube which forms an air tight receptacle. Crimping the sheet metal ends about the edges of a metal tube will not produce with any certainty an air tight seal in the joint. The paper tube has comparatively considerable thickness and is in its nature compressible. Crimping of the edges of the ends will compress the edges of the paper tube and from an air-tight sealed container. No air can pass inwardly through the joints of such a connection nor can the gases from volatile materials pass outwardly.

In the figure I have illustrated a receptacle embodying my invention.

Figure 1 illustrates a side view of the container, and Fig. 2 illustrates a section of a detail.

1 is a paper tube which forms the cylindrical wall of the container. The tube 1 may be formed of the ordinary pasteboard tube, the layers of the paper being wound circularly or spirally. In the latter case over-lapping spirals or strips of paper are united together after the manner well known in the art to form a unitary structure.

The paper tube is thoroughly soaked with a composition of paraffin and oil of tar. This is facilitated by heating the composition to a high temperature. It also may be impregnated with a mixture of paraffin and asphaltum or paraffin alone. This may be done by raising the temperature of the mixture to a high degree and allowing the tube to soak therein.

The bottom 2 and the top 3 of the receptacle are formed of lacquered sheet metal. The sheet metal is crimped around its edges so as to bind the edges of the tube as shown in Fig. 2. The edge 4 of the metal is turned in and then beaded up or rounded inward which gathers and squeezes the material and seals the joint without use of solder or other sealing means or material.

The cover 5 is preferably the ordinary friction plug cover made of lacquered tin. This form of cover is used on account of the tightness with which its edges are sealed upon insertion of the cover into the top of the container. It forms an excellent removable sealing cover.

Containers for chlorid of lime made after 11

the manner described herein prevents the chlorid of lime from deteriorating and keeps the material up to the standard required by the Food and Drug Act of June 30, 1906, which makes it absolutely essential that the container possess the qualities which are found in the container described herein and shown in the drawings.

The invention may be modified by those skilled in the art without departing from the spirit thereof.

What I claim as new and desire to secure by Letters Patent is as follows:

A receptacle having an inclosing wall formed of paper, covered, saturated with, and having its pores filled with paraffin and oil of tar and having its ends formed of lacquered metal and crimped so as to turn the edges of the ends into the inclosing wall and roll inward.

In testimony whereof, I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

HARRY M. SINCLAIR.

Witnesses:

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E. E. THOMAS.